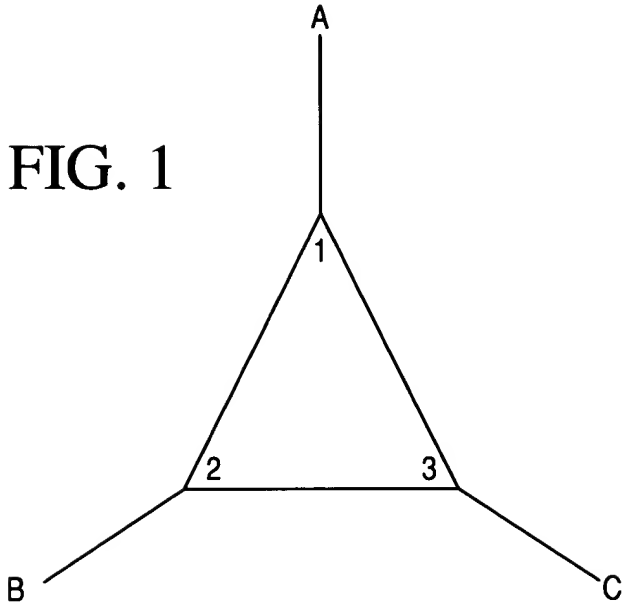
OIPE IAP68
DEC 28 2005
PATENT & TRADEMARK OFFICE

FIG. 1



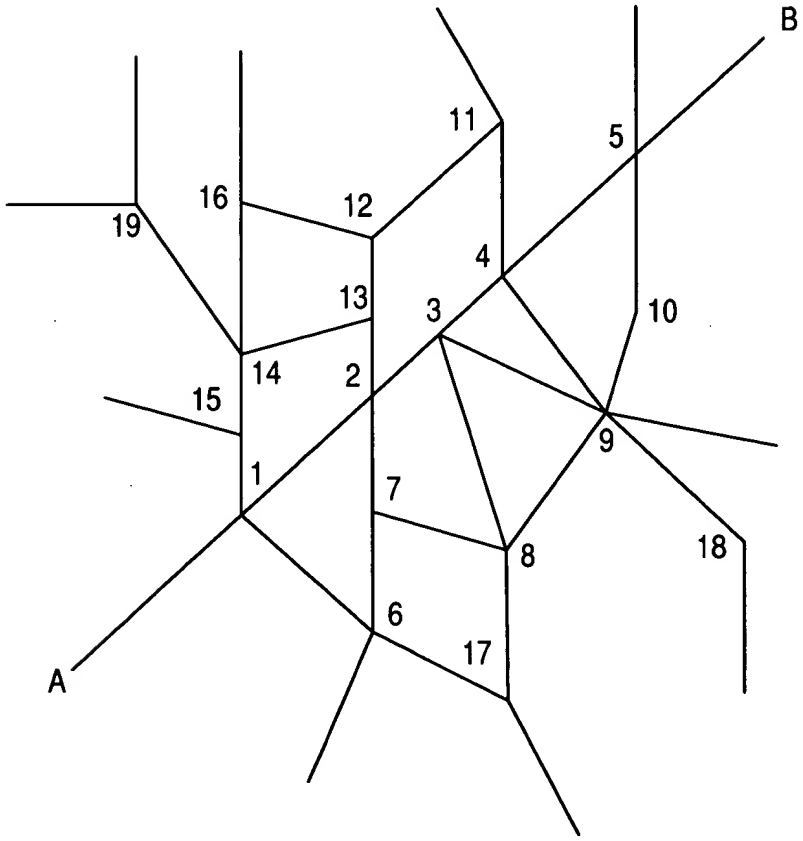


FIG. 2

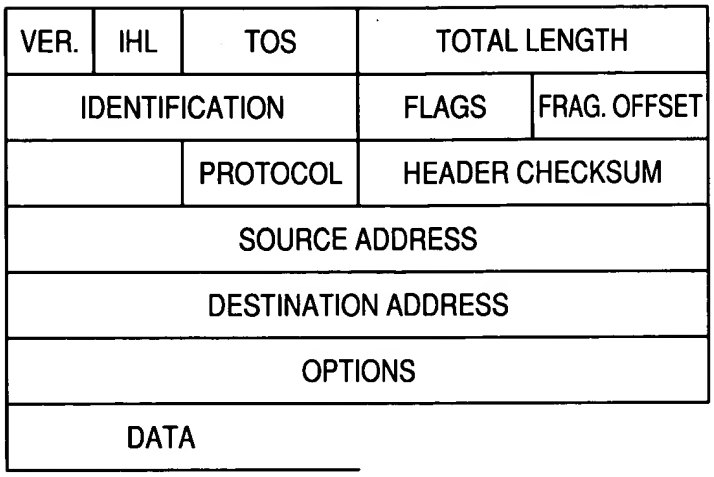


FIG. 3

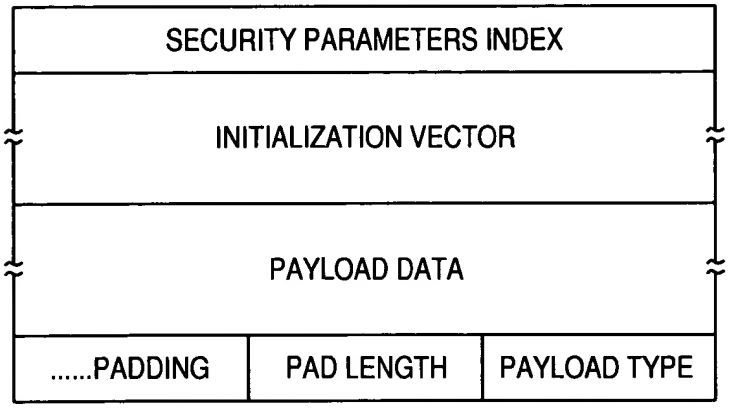


FIG. 4

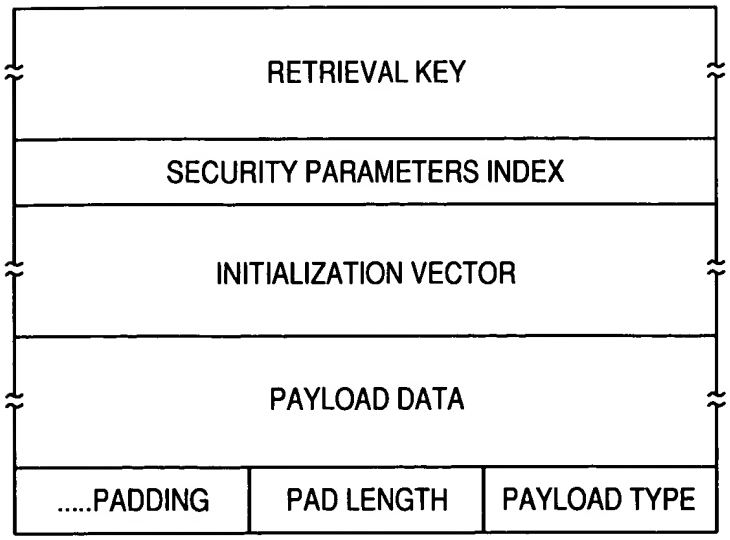


FIG. 5

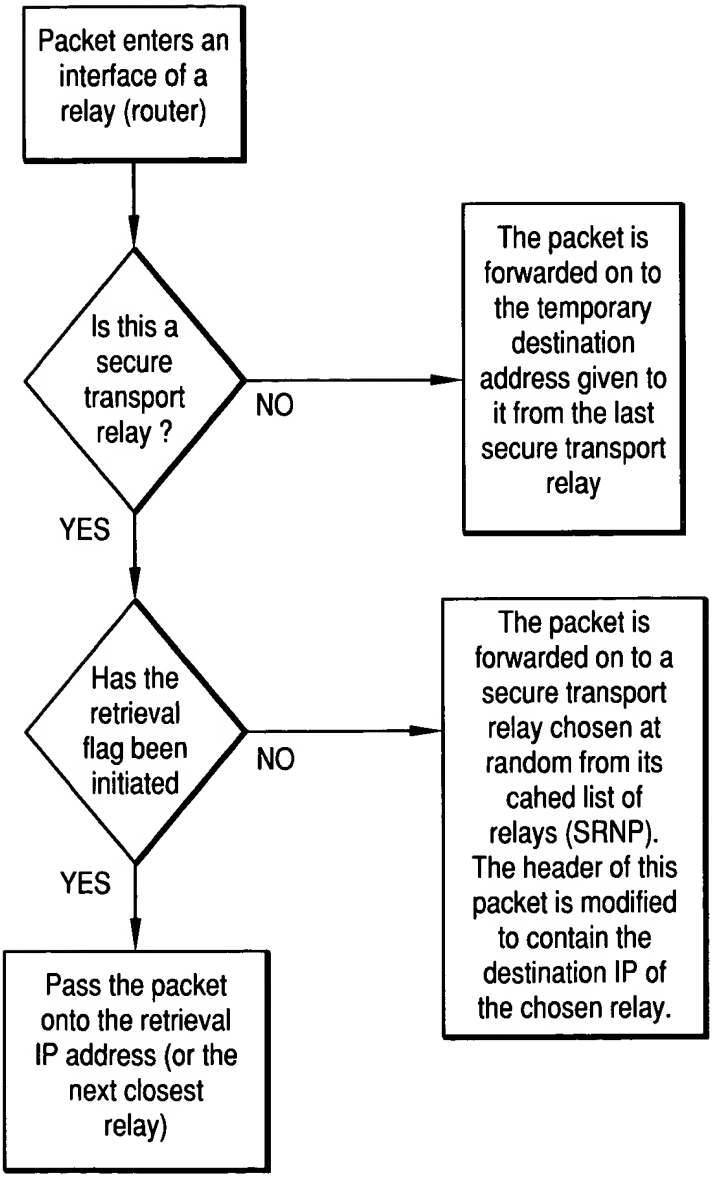

Packet enters an interface of a relay (router)
Is this a secure transport relay ?
NO
The packet is forwarded on to the temporary destination address given to it from the last secure transport relay
YES
Has the retrieval flag been initiated
NO
The packet is forwarded on to a secure transport relay chosen at random from its cahed list of relays (SRNP). The header of this packet is modified to contain the destination IP of the chosen relay.
YES
Pass the packet onto the retrieval IP address (or the next closest relay)

FIG. 6

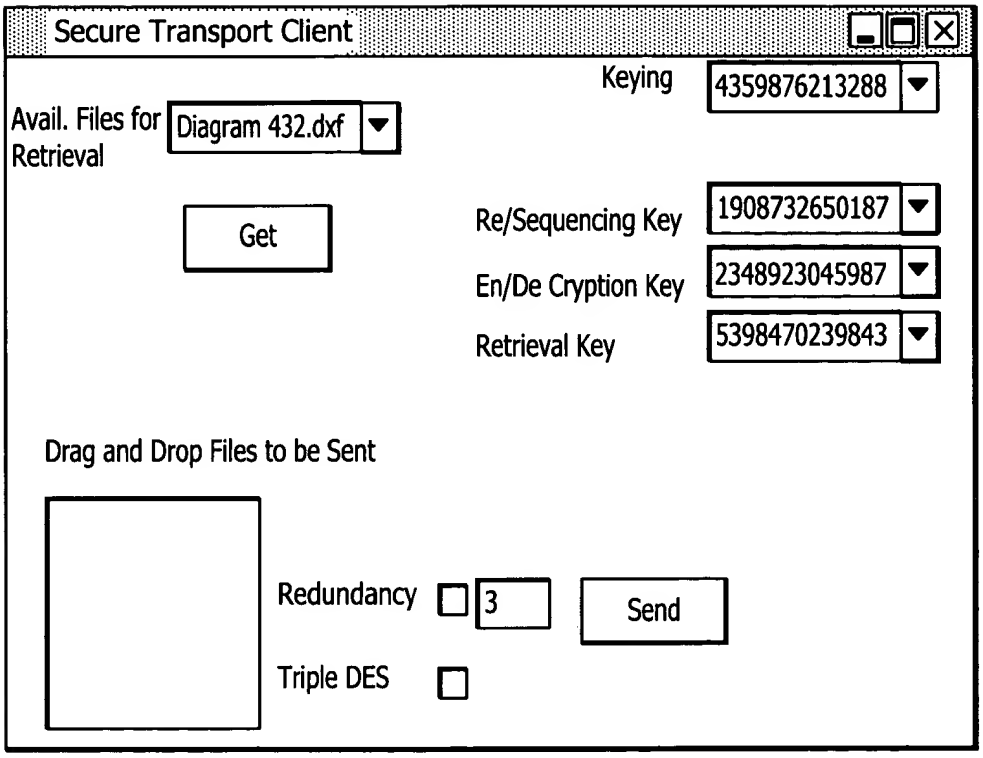

Secure Transport Client
Keying
4359876213288
Avail. Files for Retrieval
Diagram 432.dxf
Get
Re/Sequencing Key
1908732650187
En/De Cryption Key
2348923045987
Retrieval Key
5398470239843
Drag and Drop Files to be Sent
Redundancy
3
Send
Triple DES

FIG. 7

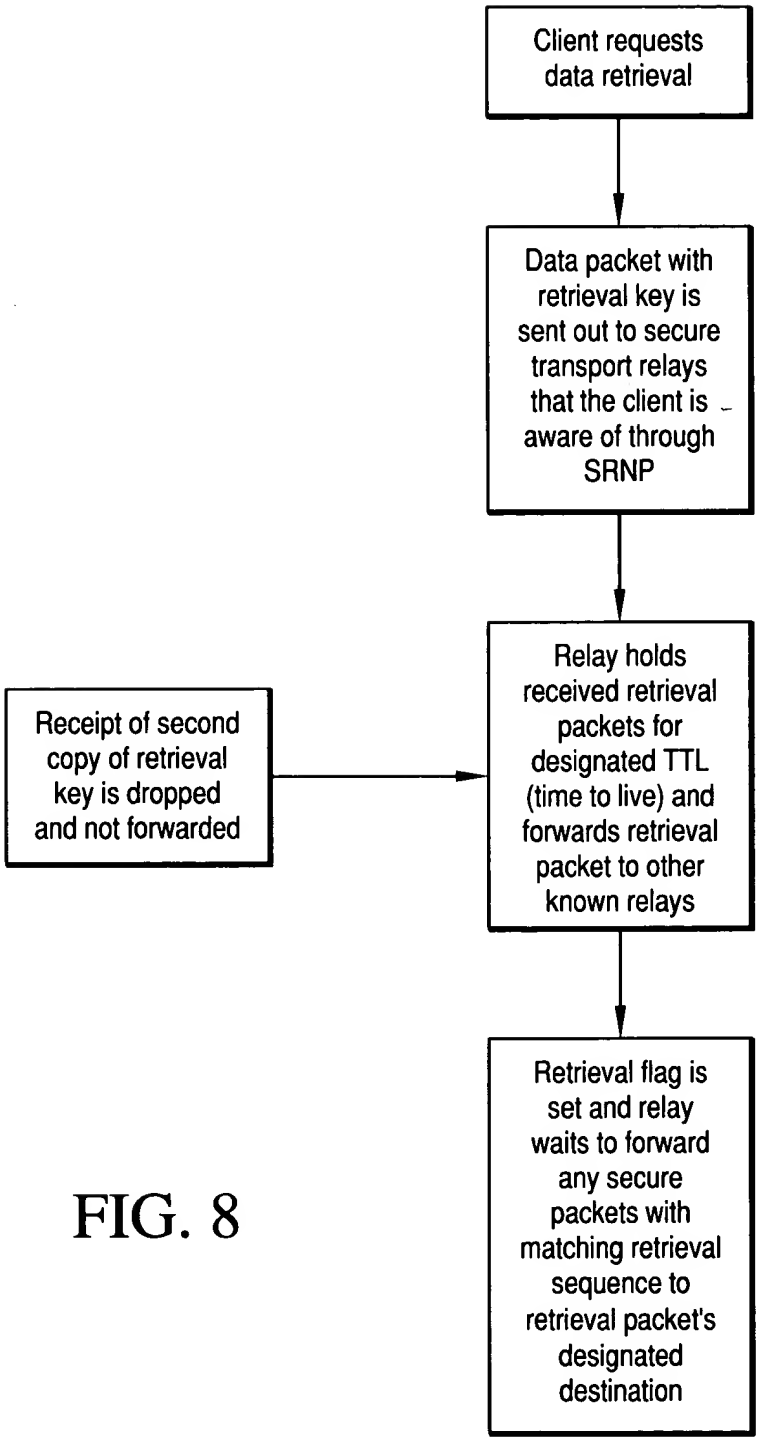

Client requests data retrieval
Data packet with retrieval key is sent out to secure transport relays that the client is aware of through SRNP
Relay holds received retrieval packets for designated TTL (time to live) and forwards retrieval packet to other known relays
Receipt of second copy of retrieval key is dropped and not forwarded
Retrieval flag is set and relay waits to forward any secure packets with matching retrieval sequence to retrieval packet's designated destination

FIG. 8